AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A beam optical component comprising a charged particle lens for focusing a charged particle beam, the charged particle lens comprising:

a first electrode having a first opening defining a first space through which the charged particle beam can propagate;

a second electrode having a second opening defining a second space through which the charged particle beam can propagate; and

first driving means coupled to at least one out of the first electrode and the second electrode for aligning the first opening with respect to the second opening;

whereby at least one out of the first and second electrodes is shaped to comprise multiple openings for focussing the charged particle beam, and wherein the multiple openings of an electrode may be replaced by each other without breaking vacuum, whereby the multiple openings replace one another as an active opening that is in line with the charged particle beam.

2. (Previously Presented) The beam optical component according to claim 1, whereby the charged particle lens comprises a third element having a third opening for focusing the charged particle beam.

3. (Previously Presented) The beam optical component according to claim 2, whereby the geometry of the first, second or third opening defines a respective first, second or third central axis.

4. (Previously Presented) The beam optical component according to claim 3, whereby the first driving means are capable of aligning the first and second central axes to a common symmetry axis.

5. (Previously Presented) The beam optical component according to claim 1, whereby the first driving means are capable of aligning the first and second electrodes to be coaxially or parallel aligned.

6. (Previously Presented) The beam optical component according to claim 3, whereby the charged particle lens comprises second driving means coupled to at least one of the second electrode and the third element for aligning the second opening with respect to the third opening.

7. (Previously Presented) The beam optical component according to claim 6, whereby the second driving means are capable of aligning the second and third central axes to a common symmetry axis.

8. (Previously Presented) The beam optical component according to claim 1, comprising a charged particle beam source.

9. (Previously Presented) The beam optical component according to claim 8, whereby the charged particle beam source comprises an extracting electrode for extracting charged particles into a vacuum.

10. (Previously Presented) The beam optical component according to claim 2, whereby at least one out of the first, second and third elements is an electrode for focusing the charged particle beam.

11. (Previously Presented) The beam optical component according to claim 10, whereby the third electrode is positioned such as to serve as an extracting electrode.

12. (Previously Presented) The beam optical component according to claim 11, whereby at least one out of the first, second and third element or electrode is shaped and positioned with respect to the charged particle beam source to serve as a beam aperture for the charged particle beam.

13. (Previously Presented) The beam optical component according to claim 6, whereby at least one out of the first and second driving means is capable of moving the respective first or second electrode in a first direction laterally to their respective first or second central axes.

14. (Previously Presented) The beam optical component according to claim 13, whereby at least one out of the first and second driving means is capable of moving the respective first or second electrode in a second direction perpendicular to the respective first or second central axis and, preferably, perpendicular to the first direction.

15. (Previously Presented) The beam optical component according to claim 14, whereby at least one out of the first and second driving means is capable of moving the respective first or second electrode into the directions of the respective first or second central axis.

16. (Previously Presented) The beam optical component according to claim 15, whereby at least one out of the first and second driving means is capable of moving the respective first or second electrode at a spatial resolution of better than 10 micrometers, preferably better than 1 micrometer and even more preferred of better than 100nm.

17. (Previously Presented) The beam optical component according to claim 16, whereby the charged particle lens comprises at least one out of the first and second measuring means to measure the actual location of the respective first or second opening with respect to the second or third opening.

18. (Previously Presented) The beam optical component according to claim 17, whereby the charged particle lens comprises electronic connections between at least one out of the first and second measuring means and the respective first or second driving means for feeding information of the measured location of the first or second opening to the first or second driving means to adjust the actual location to a desired location.

19. (Previously Presented) The beam optical component according to claim 18, whereby at least one out of the first and second driving means are remotely controllable.

20. (Previously Presented) The beam optical component according to claim 19, whereby at least one out of the first and second driving means comprises a precision motor drive, a stepping motor, a DC-motor, or a piezo-motor.

21. (Cancelled)

22. (Previously Presented) A beam optical component comprising a charged particle lens for focusing a charged particle beam, the charged particle lens comprising:

a first electrode having a first opening defining a first space through which the charged particle beam can propagate;

a second electrode having a second opening defining a second space through which the charged particle beam can propagate; and

first driving means coupled to at least one out of the first electrode and the second electrode for aligning the first opening with respect to the second opening;

whereby at least one out of the first and second electrodes is shaped to comprise multiple openings for focusing the charged particle beam, whereby at least one out of the first and second electrodes is shaped and positioned to provide that the distance of at least one of the multiple openings to an opening of an adjacent electrode in axial direction is larger by at least ten percent compared to the distance in axial direction of at least one of the other of the multiple openings to said opening.

23. (Previously Presented) The beam optical component according to claim 22, whereby at least one out of the first and second electrodes is shaped such that a thickness of the rim of at least one of the multiple openings is larger by at least a factor of two compared to a thickness of the rim of at least one of the other multiple openings of said adjacent electrode.

24. (Previously Presented) The beam optical component according to claim 23, whereby at least two of the multiple openings of the first or second electrode have essentially the same size.

25. (Previously Presented) The beam optical component according to claim 24, whereby at least one out of the first, second and third openings is rotationally symmetric with respect to its central axes.

26. (Previously Presented) The beam optical component according to claim 25, whereby at least one out of the first, second and third openings is rectangularly shaped.

27. (Previously Presented) The beam optical component according to claim 2, whereby the charged particle lens comprises at least one distance piece between the second electrode and the third element to provide for a minimum distance between said second element and said third element.

28. (Previously Presented) The beam optical component according to claim 27, whereby the charged particle lens comprises at least one holding piece for abutting the second electrode to the at least one distance piece, whereby the first holding piece is attached to the at least one distance piece.

29. (Previously Presented) The beam optical component according to claim 28, whereby the distance piece is spherical.

30. (Previously Presented) The beam optical component according to claim 29, whereby the first or second driving means are connected to at least two of the first, second and third electrode.

31. (Previously Presented) The beam optical component according to claim 30, whereby the charged particle lens comprises more than three elements or electrodes that each have an opening for focusing the charged particle beam.

32. (Previously Presented) The beam optical component according to claim 31, whereby the charged particle lens comprises more than two driving means that are connected with the third element or one of the more than three elements.

33. (Previously Presented) The beam optical component according to claim 32, whereby at least one out of the first and second openings is smaller than the third opening by a factor of two, preferably by a factor of ten and even more preferred by a factor of 50.

34. (Previously Presented) A charged particle beam device according to claim 33 for focusing a charged particle beam onto a specimen, comprising a beam optical component.

35. (Previously Presented) The charged particle beam device according to claim 34, comprising in addition:

a specimen holder to hold the specimen for inspecting or structuring the specimen; and

a beam aperture to limit the aperture angle of the charged particle beam for inspecting or structuring the specimen.

36. (Previously Presented) The charged particle beam device according to claim 35 whereby the beam optical component is positioned between the specimen holder and the beam aperture to focus the charged particle beam onto the specimen.

37. (Previously Presented) The charged particle beam device according to claim 36 comprising an objective lens and a charged particle beam source.

38. (Previously Presented) The charged particle beam device according to claim 37 whereby the beam optical component is positioned between the objective lens and the charged particle beam source.

39. (Previously Presented) Method of aligning a first opening of a first element with respect to a second opening of a second element for focusing a charged particle beam onto a specimen, comprising:

providing a beam optical component according to claim 1;

first scanning the charged particle beam across the specimen to generate a first image of the specimen with a first set of voltages applied to the first element and the second element of the beam optical component;

second scanning the charged particle beam across the specimen to generate a second image of the specimen with a second set of voltages applied to at least one out of the first element and the second element of the beam optical component;

moving the first element with respect to the second element; and

repeating the second scanning the charged particle beam until at least one structure element of the specimen identified in the first image is identified in the second image.

40. (Previously Presented) The method according to claim 39 comprising moving the second element with respect to a third element until at least one structure element of the specimen identified in the first image is identified in the second image.

41. (Previously Presented) The method according to claim 40 whereby the first set of voltages and the second set of voltages are the same for at least one of the first, second and third elements.

42. (Previously Presented) The method according to claim 41 whereby at least one out of the first, second and third elements is an electrode.

43. (Previously Presented) The method according to claim 39 whereby a charged particle beam is generated by the charged particle beam device.

44. (Cancelled) ~~The beam optical component according to claim 14, whereby the multiple openings replace one another as an active opening that is in line with the charged particle beam.~~